



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

SOUTHWEST REGIONAL OFFICE

355-A Deadmore Street, Abingdon, Virginia 24210

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www.deq.virginia.gov

January 5, 2016

Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director

Allen J. Newman, P.E.
Regional Director

Mr. Barry A. Branscome
Vice President/Director of Environmental Compliance
Vaughan-Bassett Furniture Company, Inc.
300 East Grayson Street
Galax, VA 24333

Location: Galax, Virginia
Registration No.: 10332

Dear Mr. Branscome:

Attached is a renewal Title V permit to operate your facility pursuant to 9 VAC 5 Chapter 80 of the Virginia Regulations for the Control and Abatement of Air Pollution.

This permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and civil penalty. Please read all conditions carefully.

This approval to operate does not relieve Vaughan-Bassett Furniture Company, Inc. of the responsibility to comply with all other local, state, and federal permit regulations.

Issuance of this permit is a case decision. The Regulations, at 9 VAC 5-170-200, provide that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this permit is mailed or delivered to you. Please consult that and other relevant provisions for additional requirements for such requests.

Additionally, as provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal to court by filing a Notice of Appeal with:

Mr. David K. Paylor, Director
Department of Environmental Quality
P. O. Box 1105
Richmond, VA 23218

In the event that you receive this permit by mail, three days are added to the period in which to file an appeal. Please refer to Part Two A of the Rules of the Supreme Court of Virginia for additional information including filing dates and the required content of the Notice of Appeal.

Mr. Barry Branscome
January 5, 2016
Page 2

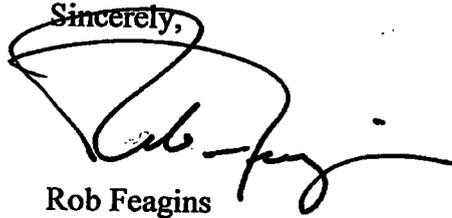
Links to pertinent federal regulations which contain applicable requirements for units at the facility are given below:

MACT ZZZZ, and NSPS IIII - <http://www.epa.gov/ttn/atw/icengines/>
MACT DDDDD - <http://www3.epa.gov/ttn/atw/boiler/boilerpg.html/>

Compliance with these regulations is required by the terms of this permit.

If you have any questions concerning this permit, please contact me at 276-676-4835.

Sincerely,

A handwritten signature in black ink, appearing to read 'Rob Feagins', written over a circular scribble.

Rob Feagins
Air Permit Manager

GRF/WMG/10332VA-16.FNL.docx

Attachments: Permit

cc: Director, OAPP (electronic file submission)
Manager, Data Analysis (electronic file submission)
Chief, Air Enforcement Branch (3AP13), U.S. EPA, Region III



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David K. Paylor
Director
Allen J. Newman, P.E.
Regional Director

Federal Operating Permit Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1, of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9 VAC 5-80-50 through 9 VAC 5-80-300, of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name: Vaughan-Bassett Furniture Company, Inc.
Facility Name: Vaughan-Bassett Plant #2
Facility Location: 307 South Railroad Avenue, Galax, Virginia
Registration Number: 10332
Permit Number: SWRO10332

This permit includes the following programs:

Federally Enforceable Requirements - Clean Air Act (Pages 5 through 46)

January 5, 2016
Effective Date

January 4, 2021
Expiration Date

Allen J. Newman FOR ALLEN J. NEWMAN
Regional Director

January 5, 2016
Signature Date

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Facility Information

Permittee

Vaughan-Basset Furniture Company, Inc.
300 East Grayson St.,
Galax, VA 24333

Facility

Vaughan-Bassett Plant #2
307 South Railroad Avenue
Galax, VA 24333

Contact Person

Barry Branscome
Vice President/Director of Environmental Compliance
276-238-2205
bbranscome@vaughanbassett.com

County-Plant Identification Number: 51-640-00036

Facility Description: NAICS Code: 337122 –Wood Furniture Manufacturing.

Facility operations include steam generation, lumber drying, woodworking operations, gluing operations, finishing operations, and other processes for manufacturing wood household furniture. Not all components undergo all process steps. Fuel burning equipment includes a 39.2 MMBtu/hr Bigelow wood/coal-fired boiler. It is equipped with an automatic modulating air/fuel system for wood fuel firing and a spreader stoker for coal firing with underfire combustion air. Scrap lumber serves as boiler fuel after processing by a hammer mill hog, with the material being transferred to a silo by a closed loop pneumatic conveying system. Four lumber drying kilns use steam heat to reduce moisture content in lumber. The facility uses a variety of standard woodworking machines which are connected to pneumatic conveying systems for dust and chip removal. These are in turn served by baghouses to control particulate emissions. The company's woodworking equipment has the capacity to process 66,000 board feet of lumber per day. Furniture finishing equipment includes thirteen dry filter back spray booths, five ovens and a flash tunnel. Equipment recently removed includes a reverse roll coater, a single roll printer, an enclosed vacuum coater and a drying oven for water-based applications. Compliant coating materials are used to meet 40 CFR 63 Subpart JJ requirements limiting emissions of volatile hazardous air pollutants (VHAPs).

Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Dates
Fuel Burning Equipment							
B-1A, B-1B, B-1C	Bs-1	Bigelow wood-fired boiler, biomass and coal are secondary fuels (1980)	39.2 MMBtu/hr heat input	Multicyclone	Bm-1	PM/PM-10	4/17/80 (as amended 6/19/00, 1/6/05, & 3/28/12)
B-2	Bs-2	Wickes distillate oil-fired boiler	17.25 MMBtu/hr heat input	-	-	-	3/22/99 (as amended 6/19/00, 1/6/05, & 3/28/12)
FP-1	FP-1	Emergency diesel fire pump	294 bhp	-	-	-	n/a
Woodworking Operations							
WO	sv-bh-11	Various equipment including sanders, saws, mills, routers, and planers	66,000 bd-ft/day total for all woodworking operations	Baghouses for control, and closed loop cyclones used on the wood fuel transfers.	df-4, df-5, df-6, df-7, df-8, df-9, df-10, & df-11	PM/PM-10	3/22/99 (as amended 6/19/00, 1/6/05, & 3/28/12)
Finishing & Adhesive Operations							
FR	-	Thirteen (13) dry filter back spray booths, five ovens and one flash tunnel	449.7 lbs/hr VOC	Overspray particulate control.	-	PM/PM-10	3/22/99 (as amended 6/19/00, 1/6/05, & 3/28/12)
Kilns							
LD (dk 1-4)	-	Four lumber drying kilns	237,800 bd-ft/cycle (14 day cycles)	-	-	-	n/a

*The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.

Process Equipment Requirements – Fuel Burning Equipment (B-1 and B-2)

Limitations

1. **Fuel Burning Equipment (B-1) – Limitations** – Particulate emissions from the Bigelow boiler (B-1) shall be controlled by a Barron Industries 30 tube BASE III 9K15-0606 ST Type B multicyclone, or equivalent, with a rated control efficiency of not less than 87 percent. The multicyclone shall be provided with adequate access for inspection. An annual inspection shall be conducted on the multicyclone by the permittee to insure structural integrity.
(9 VAC 5-80-110 C, 9 VAC 5-50-260 and condition 18 of NSR permit issued 4/17/1980 (as amended 6/19/2000, 1/6/2005, and 3/28/2012))
2. **Fuel Burning Equipment (B-1) – Limitations** – The approved fuels for the Bigelow wood-fired boiler (B-1) are wood and coal, including wood materials generated from the manufacturing processes of sources within SIC 2511. The permitted facility may switch from one of these approved fuels to another approved fuel without notification. A change to a fuel not listed above may require a permit modification.
(9 VAC 5-80-110 B, and condition 17 of NSR permit issued 4/17/1980 (as amended 6/19/2000, 1/6/2005, and 3/28/2012))
3. **Fuel Burning Equipment (B-2) – Limitations** – The approved fuel for the Wickes oil-fired boiler (B-2) is distillate fuel oil. Distillate oil is defined as fuel oil that meets the specifications for fuel oil numbers 1 or 2 under the American Society for Testing and Materials, ASTM D396-78 “Standard Specification for Fuel Oils”. A change to a fuel not listed above may require a permit modification.
(9 VAC 5-80-10 and 9 VAC 5-80-110 B, 40 CFR 60.41c and condition 12 of NSR permit issued 3/22/1999 (as amended 6/19/2000, 1/6/2005, and 3/28/2012))
4. **Fuel Burning Equipment (B-2) – Limitations** – The Wickes oil-fired boiler (B-2) shall consume no more than 600,000 gallons per year of distillate oil, calculated as the sum of each consecutive 12 month period. Except as specified in this permit, the Wickes boiler is to be operated in compliance with Federal emissions requirements under 40 CFR 60, Subpart Dc.
(9 VAC 5-80-1180, 9 VAC 5-80-110 A and 9 VAC 5-80-110 B and conditions 11 and 16 of NSR permit issued 3/22/1999 (as amended 6/19/2000, 1/6/2005, and 3/28/2012))
5. **Fuel Burning Equipment (B-1) - Limitations** – Emissions from the operation of the Bigelow wood/coal-fired boiler (B-1) shall not exceed the limits specified below:

Particulate Matter (PM)	12.7 lbs/hr	53.0 tons/yr
Sulfur Dioxide	34.2 lbs/hr	143.6 tons/yr
Nitrogen Oxides (as NO ₂)	22.5 lbs/hr	94.5 tons/yr

Volatile Organic Compounds 1.5 lbs/hr 6.3 tons/yr

(9 VAC 5-50-260, 9 VAC 5-50-180, and condition 19 of NSR permit issued 4/17/1980 (as amended 6/19/2000, 1/6/2005, and 3/28/2012))

6. **Fuel Burning Equipment (B-1) – Limitations** – Visible emissions from the Bigelow wood/coal-fired boiler (B-1) exhaust shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity, as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction.
(9 VAC 5-50-80 and 9 VAC 5-80-110 K)

7. **Fuel Burning Equipment (B-2) - Limitations** – Emissions from the operation of the Wickes distillate oil-fired boiler (B-2) shall not exceed the limits specified below:

Particulate Matter (PM)	0.2 lbs/hr	0.6 tons/yr
Sulfur Dioxide	8.8 lbs/hr	21.5 tons/yr
Nitrogen Oxides (as NO ₂)	2.5 lbs/hr	6.0 tons/yr
Carbon Monoxide	0.6 lbs/hr	1.5 tons/yr

(9 VAC 5-50-260, 9 VAC 5-50-180, and condition 13 of NSR permit issued 3/22/99 (as amended 6/19/2000, 1/6/2005 and 3/28/2012))

8. **Fuel Burning Equipment (B-2) – Limitations** – Visible emissions from the Wickes distillate oil-fired boiler (B-2) exhaust stack shall not exceed 10 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 20 percent opacity. This condition applies at all times except during startup, shutdown and malfunction.
(9 VAC 5-80-1180, 9 VAC 5-50-20, 9 VAC 5-80-110 K and condition 14 of NSR permit issued 3/22/99 (as amended 6/19/2000, 1/6/2005, and 3/28/2012))

Monitoring

9. **Fuel Burning Equipment (B-1) – Monitoring** – Visible Emissions Monitoring – Weekly observations of the presence of visible emissions from the Bigelow boiler (B-1) stack shall be made when the boiler is operating. The presence of visible emissions shall require the permittee to:
- Take timely corrective action such that the unit resumes operation with no visible emissions, or,
 - Conduct a visible emission evaluation (VEE), in accordance with EPA Method 9 (reference 40 CFR 60 Appendix A) for a minimum of six (6) minutes, to assure visible

emissions from the affected unit are at or below the limits contained in Condition 8. If the six-minute average opacity exceeds 20 percent opacity, the observation period shall continue for a total of eighteen (18) minutes. If compliance is not demonstrated by this VEE, timely corrective action shall be taken such that the equipment resumes operation with visible emissions less than or equal to the opacity limits. The corrective action shall be followed by a six-minute VEE in accordance with Method 9 to confirm compliance or 18 minutes if the opacity continues to be greater than the applicable limit. Additionally, following an observation that detects the presence of visible emissions, a daily observation shall be made during the subsequent four (4) operational periods for the presence of visible emissions.

The permittee shall maintain an observation log to demonstrate compliance, including any data required by 40 CFR 60 Appendix A, Method 9. The logs shall include the date and time of the observations, whether or not there were visible emissions the results of all VEEs, any necessary corrective action, and the name of the observer. If the boiler has not been operated for the entire day, it shall be noted in the log book.

(9 VAC 5-50-20 E, 9 VAC 5-80-110 E and K)

10. **Compliance Assurance Monitoring (CAM) Plan (B-1)** – The permittee shall monitor, operate, calibrate and maintain the multicyclone controlling the Bigelow boiler according to the following:

Monitoring, Frequency, Records	Performance Criteria	Indicator Range; Averaging Period
Monitor multicyclone pressure drop readings daily. Record results daily.	Observed deviation from normal pressure drop.	Pressure drop from instantaneous observation of Magnahelic gauge or equivalent is no more than 10% below established normal range of 0.5 to 3.8" H ₂ O.
External cyclone inspections, when pressure drop is outside the indicator range. Internal cyclone and ductwork inspection as required to alleviate any flow problems.	Inspections by a qualified employee with at least one year of experience in maintenance of mechanical equipment.	As noted above.

11. **Compliance Assurance Monitoring (CAM) Plan (B-1)** – The permittee shall conduct the monitoring and fulfill the other obligations specified in 40 CFR 64.7 through 40 CFR 64.9. (9 VAC 5-80-110 E and 40 CFR 64.6 (c))
12. **Compliance Assurance Monitoring (CAM) Plan (B-1)** – At all times, the permittee shall maintain the monitoring equipment, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment. (9 VAC 5-80-110 E and 40 CFR 64.7 (b))

13. **Compliance Assurance Monitoring (CAM) Plan (B-1)** – Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the Bigelow boiler is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of compliance assurance monitoring, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by inadequate maintenance or improper operation are not malfunctions.
(9 VAC 5-80-110 E and 40 CFR 64.7 (c))
14. **Compliance Assurance Monitoring (CAM) Plan (B-1)** – Upon detecting an excursion or exceedance, the permittee shall restore operation of the Bigelow boiler (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup and shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator, designated condition, or below the applicable emission limitation or standard, as applicable.
(9 VAC 5-80-110 E and 40 CFR 64.7 (d)(1))
15. **Compliance Assurance Monitoring (CAM) Plan (B-1)** – Determination that acceptable procedures were used in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.
(9 VAC 5-80-110 E and 40 CFR 64.7 (d)(2))
16. **Compliance Assurance Monitoring (CAM) Plan (B-1)** – If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director, Southwest Regional Office and, if modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
(9 VAC 5-80-110 E and 40 CFR 64.7 (e))

17. **Compliance Assurance Monitoring (CAM) Plan (B-1)** – If the number of exceedances or excursions exceeds 5 percent duration of the operating time for the Bigelow boiler for a semiannual reporting period, the permittee shall develop, implement and maintain a Quality Improvement Plan (QIP) in accordance with 40 CFR 64.8. If a QIP is required, the permittee shall have it available for inspection. The QIP initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the permittee shall modify the plan to include procedures for conducting one or more of the following, as appropriate:
- a. Improved preventative maintenance practices;
 - b. Process operation changes;
 - c. Appropriate improvements to control methods;
 - d. Other steps appropriate to correct control performance; and
 - e. More frequent or improved monitoring.
(9 VAC 5-80-110 E and 40 CFR 64.8(a) and (b))

Recordkeeping

18. **Fuel Burning Equipment (B-1) - On Site Records** – Emission monitoring, record keeping, and reporting not otherwise required by this permit shall consist of the following operating data, with the content and format of such records arranged with the Southwest Regional Office. These records shall include, but are not limited to:
- a. The consumption of wood and coal fuel, calculated monthly as the sum of each consecutive 12-month period.
 - b. Annual hours of operation of the Bigelow boiler, the sulfur content of the coal, and annual emissions calculations for the purpose of compliance certification with the terms of this permit, including hourly and annual emissions limitations. Hourly emissions shall be calculated by dividing the annual emissions calculated monthly as the sum of each consecutive 12-month period, by the annual hours of operation appropriate for the same period.
 - c. The DEQ-approved, pollutant-specific emission factors and the equations used to determine compliance with condition 5. This shall also include the heat content of the wood used as fuel.
 - d. Scheduled and unscheduled maintenance and operator training.
 - e. Records of annual inspections of the multicyclone.

- f. Results of all stack tests, visible emission monitoring and evaluations, and performance evaluations.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-50-20, 9 VAC 5-50-50, 9 VAC 5-80-110 E and K)

19. **Fuel Burning Equipment (B-2) – On Site Records** – The maximum sulfur content of the distillate oil to be burned in the Wickes boiler shall not exceed 0.5 percent by weight per shipment. The permittee shall obtain a certification from the fuel supplier with each shipment of distillate oil. Each fuel supplier certification shall include the following:

- a. The name of the fuel supplier;
- b. The date on which the oil was received;
- c. The volume of distillate oil delivered in the shipment;
- d. A statement that the oil complies with the American Society for Testing and Materials specifications for fuel oil numbers 1 and 2; and
- e. An indication that the sulfur content of the distillate oil does not exceed 0.5 percent by weight.

(9 VAC 5-80-1180, 9 VAC 5-50-50 and 9 VAC 5-80-110, 40 CFR 60.48c(f)(1), 40 CFR 60.42c(h)(1) and condition 15 of NSR permit issued 3/22/99 (as amended 6/19/2000, 1/6/2005 and 3/28/2012))

Reporting

20. **Fuel Burning Equipment (B-2) – Fuel Quality Reporting** – The permittee shall submit fuel quality reports to the Director, Southwest Regional Office within 30 days after the end of each calendar quarter in which shipments of distillate oil were received during that quarter. The reports shall include:

- a. The dates included in the calendar quarter;
- b. A copy of all fuel supplier certifications for all shipments of distillate oil received during the calendar quarter or a quarterly summary form each fuel supplier that includes the information specified in Condition 19 for each shipment of distillate oil; and

- c. A signed statement from the owner or operator of the facility that the fuel supplier certifications or summaries of fuel supplier certifications represent all of the distillate oil burned or received at the facility.
(9 VAC 5-80-1180, 9 VAC 5-50-50, 9 VAC 5-80-110, 40 CFR 60.48c(e)(11) and condition 25 of NSR permit issued 3/22/99 (as amended 6/19/2000, 1/6/2005 and 3/28/2012))

MACT Subpart DDDDD – Industrial, Commercial, and Institutional Boilers Major Sources - Fuel Burning Equipment (B-1 and B-2)

Emission and Work Practice Standards, Emission Reduction Measures and Management Practices

21. **MACT Subpart DDDDD –** The permittee shall comply with the applicable requirements of National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Major Sources 40 CFR 63, Subpart DDDDD as listed in Conditions 22 through 27 by the applicable compliance date as specified in 40 CFR 63.7510, or an approved extension of compliance per 40 CFR 63.6(i)(6)(i).
(9 VAC 5 80-110, 40 CFR Part 63.7510 and 40 CFR 63.6(i)(6)(i))
22. **MACT Subpart DDDDD –Emissions Standards, Work Practice Standards, Emission Reduction Measures and Management Practices –** The permittee shall comply with the emissions standards from Table 2, the work practice standards from Table 3, emission reduction measures and management practices specified in 40 CFR 63.7500.
(9 VAC 5 80-110 and 40 CFR 63.7500)

General Compliance Requirements

23. **MACT Subpart DDDDD – General Compliance Requirements –** The permittee shall comply with the General Compliance Requirements specified in 40 CFR 63.7505.
(9 VAC 5 80-110 and 40 CFR 63.7505)

Initial Compliance Requirements

24. **MACT Subpart DDDDD – Initial Compliance Requirements –** The permittee shall comply with the Initial Compliance Requirements specified in 40 CFR 63.7510 and 40 CFR 63.7520.
(9 VAC 5 80-110, 40 CFR 63.7510 and 40 CFR 63.7520)

Continuous Compliance Requirements

25. **MACT Subpart DDDDD – Continuous Compliance –** The permittee shall demonstrate continuous compliance with the work practice and management practice standards as specified in 40 CFR 63.7515 and 40 CFR 63.7540.
(9 VAC 5 80-110, 40 CFR 63.7515 and 40 CFR 63.7540)

Notifications, Reporting and Recordkeeping Requirements

26. **MACT Subpart DDDDD – Notifications, Reporting and Recordkeeping** - The permittee shall submit notifications, maintain the records and submit reports as specified in 40 CFR 63.7545, 40 CFR 63.7550, and 40 CFR 63.7555.
(9 VAC 5 80-110, 40 CFR 63.7545, 40 CFR 63.7550 and 40 CFR 63.7555)

Other Requirements and Information

27. **MACT Subpart DDDDD – General Provisions** - The permittee shall comply with the applicable General Provisions as specified in 40 CFR 63.7505.
(9 VAC 5 80-110 and 40 CFR 63.7505)

Process Equipment Requirements – Fuel Burning Equipment (FP-1)

Limitations

28. **Fuel Burning Equipment (FP-1) – Limitations** – Visible emissions from the emergency diesel fire pump (FP-1) shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity. The opacity standards for the engine apply at all times except during periods of startup, shutdown and malfunction.
(9 VAC 5-50-20, 9 VAC 5-50-80 and 9 VAC 5-80-110)
29. **Fuel Burning Equipment (FP-1) – Limitations** – The approved fuel for the emergency diesel fire pump (FP-1) is distillate oil fuel. A change in the fuel may require a permit to modify and operate.
(9 VAC 5-80-110)

Monitoring

30. **Fuel Burning Equipment (FP-1) – Monitoring – Visible Emissions Monitoring** – At least one time in any week the emergency diesel fire pump operates an observation of the presence of visible emissions from the emergency diesel fire pump (FP-1) shall be made. The presence of visible emissions shall require the permittee to:
- a. Take timely corrective action such that the unit resumes operation with no visible emissions, or,
 - b. Conduct a visible emission evaluation (VEE), in accordance with EPA Method 9 (reference 40 CFR 60 Appendix A) for a minimum of six minutes, to assure visible emissions from the affected unit are 20 percent opacity or less. If any of the 15-second observations exceeds 20 percent opacity, the observation period shall continue for a total of sixty (60) minutes. If compliance is not demonstrated by this VEE,

timely corrective action shall be taken such that the equipment resumes operation with visible emissions less than or equal to the opacity limits.

The permittee shall maintain an observation log to demonstrate compliance. The logs shall include the date and time of the observations, whether or not there were visible emissions the results of all VEEs, any necessary corrective action, and the name of the observer. If the emergency diesel fire pump has not been operated for the entire week, it shall be noted in the log book.

(9 VAC 5-50-20 E, 9 VAC 5-80-110 E and K)

MACT Subpart ZZZZ – Stationary Reciprocating Internal Combustion Engines (FP-1)

Emission and Operating Limitations

31. **MACT Subpart ZZZZ - Emission Limitations (FP-1)** – The permittee shall comply with the emission limitations and other requirements in Table 2c (1) to Subpart ZZZZ of Part 63. (9 VAC 5-80-110 and 40 CFR 63.6602)

Initial Compliance Requirements

32. **MACT Subpart ZZZZ – Operation & Maintenance (FP-1)** - The permittee shall operate and maintain the stationary reciprocating internal combustion engine (RICE) and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which shall provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. (9 VAC 5-80-110 and 40 CFR 63.6625(e))
33. **MACT Subpart ZZZZ – Monitoring (FP-1)** – A non-resettable hour meter shall be installed on the engine if one is not already installed. If the permittee opts to utilize an oil analysis program the permittee shall meet the requirements specified in 40 CFR 63.6625(i). (9 VAC 5-80-110, 40 CFR 63.6625(i) and 40 CFR 63.6625(f))
34. **MACT Subpart ZZZZ – Operation (FP-1)** - The permittee shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. (9 VAC 5-80-110 and 40 CFR 63.6625(h))

General Compliance Requirements

35. **MACT Subpart ZZZZ – General Compliance (FP-1)** – The permittee shall be in compliance with the emission limitations, operating limitations and other requirements in Subpart ZZZZ that apply to the source at all times. At all times the permittee shall operate and maintain the affected source in a manner consistent with safety and good air pollution control practices for minimizing emissions as specified in 40 CFR 63.6605. (9 VAC 5-80-110 and 40 CFR 63.6605)

Continuous Compliance Requirements

36. **MACT Subpart ZZZZ – Continuous Compliance (FP-1)** - The permittee shall demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Table 2c to Subpart ZZZZ of Part 63 that apply to the source according to the methods specified in Table 6 to Subpart ZZZZ of Part 63. The permittee shall report each instance in which the permittee did not meet each emission limitation or operating limitation in Tables 2c to Subpart ZZZZ of Part 63 that applies to the source. These deviations shall be reported as specified in 40 CFR 63.6640 (b).
(9 VAC 5-80-110, 40 CFR 63.6640(a) and 40 CFR 63.6640(b))
37. **MACT Subpart ZZZZ – Continuous Compliance (FP-1)** - The permittee shall report each instance in which the permittee did not meet the requirements in Table 8 to Subpart ZZZZ of Part 63.
(9 VAC 5-80-110 and 40 CFR 63.6640(e))
38. **MACT Subpart ZZZZ – Continuous Compliance (FP-1)** - In order for the engine to be considered an emergency stationary RICE under Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for up to 50 hours per year, as described in 40 CFR 63.6640(f)(1) through (4), is prohibited. If the permittee does not operate the engine according to the requirements in 40 CFR 63.6640(f)(1) through (4), the engine will not be considered an emergency engine under Subpart ZZZZ and shall meet all requirements for non-emergency engines.
(9 VAC 5-80-110 and 40 CFR 63.6640(f))

Notifications, Reports, and Records

39. **MACT Subpart ZZZZ – Recordkeeping (FP-1)** - The permittee shall keep the following records:
 - a. A copy of each notification and report that the permittee submitted to comply with Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that the permittee submitted, according to the requirement in §63.10(b)(2)(xiv).
 - b. Records of the occurrence and duration of each malfunction of operation (i.e. process equipment) or the air pollution control and monitoring equipment.
 - c. Records of all required maintenance performed on the air pollution control and monitoring equipment.
 - d. Records of all actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

- e. Records required in Table 6 to Subpart ZZZZ to Part 63 to show continuous compliance with each emission or operating limitation that applies to the permittee.
- f. Records of the maintenance conducted on the stationary RICE in order to demonstrate that the source operated and maintained the stationary RICE and after-treatment control device (if any) according to the permittee's maintenance plan.

Records shall be in a form suitable and readily available (in hard copy or electronic form) for expeditious review according to §63.10(b)(1). Each record shall be kept for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report or record.

(9 VAC 5-80-110, 40 CFR 63.6655(a), (d), (e), (f) and 40 CFR 63.6660)

- 40. **MACT Subpart ZZZZ – Recordkeeping (FP-1)** – If the emergency stationary RICE does not meet the standards in Subpart ZZZZ applicable to non-emergency engines, the permittee shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The documentation shall include the information specified in 40 CFR 63.6655(f).
(9 VAC 5-80-110 and 40 CFR 63.6655(f))
- 41. **MACT Subpart ZZZZ – Reporting (FP-1)** - The permittee shall comply with the applicable requirements in Table 2c (1) and Table 8 to Subpart ZZZZ to Part 63.
(9 VAC 5-80-110, 40 CFR 63.6640(b) and 40 CFR 63.6640(e)).

Process Equipment Requirements – Woodworking Operations (WO)

Limitations

- 42. **Woodworking Operations – Limitations** – Particulate emissions from the woodworking process (WO) shall be controlled by fabric filter baghouses. The baghouses shall be provided with adequate access for inspection and those that exhaust directly to the atmosphere shall be equipped with a device to continuously measure the differential pressure drop across the filter. The device shall be installed in an accessible location and shall be maintained by the permittee in proper working order and checked weekly, with readings noted in a log.
(9 VAC 5-80-110 C, 9 VAC 5-80-110 K, 9 VAC 5-50-260, 9 VAC 5-40-2270 A, and Condition 12 of NSR permit issued 3/22/99 (as amended 6/19/2000, 1/6/2005 and 3/28/2012))
- 43. **Woodworking Operations – Limitations** – All subsequent transfer of the collected material from the woodworking equipment shall be controlled by a baghouse or completely enclosed transfer system.
(9 VAC 5-80-110 C, 9 VAC 5-80-1180, and condition 22 of NSR permit issued 3/22/99 (as amended 6/19/2000, 1/6/2005 and 3/28/2012))

44. **Woodworking Operations – Limitations** – Particulate emissions from each emission point for the woodworking process (WO) shall not exceed the limit specified below:

Particulate 0.05 gr/scf of exhaust gas

Compliance with these limits shall be determined as stated in Conditions 45 and 46, or as demonstrated by performance test.

(9 VAC 5-40-2270 B and 9 VAC 5-80-110)

45. **Woodworking Operations – Limitations** – Visible emissions from the operation of woodworking equipment through baghouse exhausts of Df-4, Df-5, Df-6, and Df-11 shall not exceed 20% opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A), except for one six-minute period in any hour of not more than 60% opacity. Visible emissions from the operation of woodworking equipment through exhausts of baghouses Df-9 and Df-10 shall not exceed 20% opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A), except for one six-minute period in any hour of not more than 30% opacity.
(9 VAC 5-40-2280, 9 VAC 5-50-80, and 9 VAC 5-80-110 K)

46. **Woodworking Operations – Limitations** – Visible emissions from the operation of the CNC router through exhausts from baghouses Df-7 and Df-8 shall not exceed 5% opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This conditions applies to any baghouse controlling the transfer of any collected material from this equipment. This condition applies at all times except during startup, shutdown and malfunction.
(9 VAC 5-80-1180, 9 VAC 5-50-20, 9 VAC 5-50-260 and 9 VAC 5-80-110 K and condition 20 of NSR permit issued 3/22/99 (as amended 6/19/2000, 1/6/2005 and 3/28/2012))

Monitoring

47. **Woodworking Operations – Monitoring** – A visible emissions check shall be performed on baghouse exhausts for compliance with limits on visible emissions as specified in Conditions 45 and 46 above. Visible checks on baghouse exhausts shall be conducted at least once daily during periods of normal facility operation for a sufficient time interval to determine if there are any visible emissions. If visible emissions are observed during these daily observations, or at any other time, visible emissions evaluations (VEEs) in accordance with 40 CFR 60 Appendix A, Method 9 shall be conducted on those unit with visible emissions. The VEE shall be conducted for a minimum of six (6) minutes. If the six-minute average opacity exceeds 20%, or 5% for baghouses Df-7 and Df-8, or 10% for fugitives, the Method 9 evaluation shall be immediately continued for a total evaluation time of 18 minutes, or procedures to correct the visible emission condition shall be taken immediately. The corrective action shall be followed by a six minute VEE in accordance with Method 9 to confirm compliance or 18 minutes if the opacity continues to be greater than the applicable limit. A record of each visible emission observation shall be maintained, including any data required by 40 CFR 60 Appendix A, Method 9. The record shall include, at a minimum, the date, time, name of the emission unit, the applicable visible

emissions requirement, the results of the observation, and the name of the observer. If excess emissions are expected for more than one hour, DEQ malfunction procedures shall be implemented.

(9 VAC 5-40-20, 9 VAC 5-50-20, and 9 VAC 5-80-110 K)

48. **Compliance Assurance Monitoring (CAM) Plan (WO)** – The permittee shall monitor, operate, calibrate and maintain baghouses Df-4, Df-5, Df-6, Df-7, Df-8, Df-9, Df-10 and Df-11 controlling woodworking operations according to the following:

Monitoring, Frequency, Records	Performance Criteria	Indicator Range; Averaging Period
Daily visible emissions checks per condition 47, with results recorded daily.	Check for presence of visible emissions.	Instantaneous observation of visible emission.
Method 9 visible emissions evaluations per condition 47, when triggered by observation of visible emissions.	Conduct visible emissions evaluation in accordance with 40 CFR 60, Appendix A, Method 9. Performed by certified observer.	Opacity is less than or equal to 20% for Df-4, Df-5, Df-6, Df-9, Df-10, and Df-11. Opacity is less than or equal to 5% for Df-7 and Df-8.
Weekly external baghouse inspections with weekly pressure drop recordings.	External baghouse inspection by a qualified employee with at least 1 year of experience in maintenance of mechanical equipment.	Indicator range consists of pressure drops above 0.3" water column and below 6.4" water column.
Annual internal baghouse inspections or when indicated by pressure drop.	Internal baghouse inspection by a qualified employee with at least 1 year of experience in maintenance of mechanical equipment.	Air flow restrictions affecting proper operation of baghouse.

49. **Compliance Assurance Monitoring (CAM) Plan (WO)** – The permittee shall conduct the monitoring and fulfill the other obligations specified in 40 CFR 64.7 through 40 CFR 64.9. (9 VAC 5-80-110 E and 40 CFR 64.6 (c))
50. **Compliance Assurance Monitoring (CAM) Plan (WO)** – At all times, the permittee shall maintain the monitoring equipment, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment. (9 VAC 5-80-110 E and 40 CFR 64.7 (b))
51. **Compliance Assurance Monitoring (CAM) Plan (WO)** – Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall

collect data at all required intervals) at all times that the woodworking equipment is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of compliance assurance monitoring, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by inadequate maintenance or improper operation are not malfunctions. (9 VAC 5-80-110 E and 40 CFR 64.7 (c))

52. **Compliance Assurance Monitoring (CAM) Plan (WO)** – Upon detecting an excursion or exceedance, the permittee shall restore operation of the woodworking equipment (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup and shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator, designated condition, or below the applicable emission limitation or standard, as applicable. (9 VAC 5-80-110 E and 40 CFR 64.7 (d)(1))
53. **Compliance Assurance Monitoring (CAM) Plan (WO)** – Determination that acceptable procedures were used in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process. (9 VAC 5-80-110 E and 40 CFR 64.7 (d)(2))
54. **Compliance Assurance Monitoring (CAM) Plan (WO)** – If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director, Southwest Regional Office and, if modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. (9 VAC 5-80-110 E and 40 CFR 64.7 (e))
55. **Compliance Assurance Monitoring (CAM) Plan (WO)** – If the number of exceedances or excursions exceeds 5 percent duration of the operating time for the baghouse for a semiannual reporting period, the permittee shall develop, implement and maintain a Quality

Improvement Plan (QIP) in accordance with 40 CFR 64.8. If a QIP is required, the permittee shall have it available for inspection. The QIP initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the permittee shall modify the plan to include procedures for conducting one or more of the following, as appropriate:

- a. Improved preventative maintenance practices;
- b. Process operation changes;
- c. Appropriate improvements to control methods;
- d. Other steps appropriate to correct control performance; and
- e. More frequent or improved monitoring.
(9 VAC 5-80-110 E and 40 CFR 64.8(a) and (b))

Recordkeeping

56. **Woodworking Operations - On Site Records** - The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Southwest Regional Office. These records shall include, but are not limited to:

- a. Scheduled and unscheduled maintenance and operator training.
- b. Results of all stack tests, visible emission evaluations, and performance evaluations.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-50-50 and 9 VAC 5-80-110)

Process Equipment Requirements – Finishing and Adhesive Operations (FR)

Limitations

57. **Finishing Operations (FR) - Limitations** – The total VOC emissions from the sap/equalizer stains, general stains, wipe stains, shade stains, spatter stains, spray pads, and water base basecoat for the spray booths shall not exceed 129.89 tons per year, calculated monthly as the sum of each consecutive 12 month period.

(9 VAC 5-80-1180, 9 VAC 5-80-110 and Condition 5 of NSR permit issued 3/22/99 (as amended 6/19/2000, 1/6/2005, and 3/28/2012))

58. **Finishing Operations (FR) - Limitations** – The total VOC emissions from sealer from the spray booths shall not exceed 60.19 tons per year, calculated monthly as the sum of each consecutive 12 month period.
(9 VAC 5-80-1180, 9 VAC 5-80-110 and Condition 6 of NSR permit issued 3/22/99 (as amended 6/19/2000, 1/6/2005, and 3/28/2012))
59. **Finishing Operations (FR) - Limitations** – The total VOC emissions from lacquer from the spray booths shall not exceed 104.04 tons per year, calculated monthly as the sum of each consecutive 12 month period.
(9 VAC 5-80-1180, 9 VAC 5-80-110 and Condition 7 of NSR permit issued 3/22/99 (as amended 6/19/2000, 1/6/2005, and 3/28/2012))
60. **Finishing Operations (FR) - Limitations** – The total VOC emissions from lacquer thinner from the spray booths shall not exceed 35.53 tons per year, calculated monthly as the sum of each consecutive 12 month period. Lacquer thinner shall not contain hazardous air pollutants.
(9 VAC 5-80-1180, 9 VAC 5-80-110 and Condition 8 of NSR permit issued 3/22/99 (as amended 6/19/2000, 1/6/2005, and 3/28/2012))
61. **Finishing Operations (FR) - Limitations** – Emissions from the operation of the furniture finishing operations shall not exceed the limits specified below:
- | | | |
|----------------------------|-------------|---------------|
| Particulate Matter/PM-10 | 25.2 lb/hr | 19.5 tons/yr |
| Volatile Organic Compounds | 449.7 lb/hr | 329.7 tons/yr |
- Compliance with these limits shall be determined by material balance as stated in conditions 57 through 60, and conditions 62 and 63 of this permit.
(9 VAC 5-50-260, 9 VAC 5-60-300, 9 VAC 5-80-110 and Condition 9 of NSR permit issued 3/22/99 (as amended 6/19/2000, 1/6/2005, and 3/28/2012))
62. **Finishing and Adhesive Operations (FR) - Limitations** – Particulate emissions from the spray booths shall be controlled by filters and airless or high volume low pressure (hvlp) equipment to control overspray. The filters shall be provided with adequate access for inspection. Volatile organic compound emissions from the spray booths shall be minimized by the use of airless spray nozzles, or HVLP spray nozzles.
(9 VAC 5-80-1180, 9 VAC 5-50-260 and Conditions 3 and 4 of NSR permit issued 3/22/99 (as amended 6/19/2000, 1/6/2005, and 3/28/2012))
63. **Finishing and Adhesive Operations (FR) – Limitations** – Visible emissions from the dry filter back spray booth exhausts shall not exceed five (5) percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction.
(9 VAC 5-50-260, 9 VAC 5-50-80, 9 VAC 5-80-110 K, and Condition 10 of NSR permit issued 3/22/99 (as amended 6/19/2000, 1/6/2005, and 3/28/2012))

64. **Finishing and Adhesive Operations (FR) - VOC Work Practice Standards** - At all times the disposal of volatile organic compounds shall be accomplished by taking measures, to the extent practicable, consistent with air pollution control practices for minimizing emissions. Volatile organic compounds shall not be intentionally spilled, discarded in sewers which are not connected to a treatment plant, or stored in open containers, or handled in any other manner that would result in evaporation beyond that consistent with air pollution practices for minimizing emissions.
(9 VAC 5-50-20 F and 9 VAC 5-80-110)

Recordkeeping

65. **Finishing and Adhesive Operations (FR) – Recordkeeping** – Emission monitoring, record keeping and reporting not otherwise required by this permit shall consist of the following operating data:
- a. A monthly and annual material balance including the throughput and emissions of particulate matter and volatile organic compounds for finishing operations. Hourly emissions shall be calculated by dividing the total daily throughput by the corresponding hours of booth operation. Annual throughput and emissions shall be calculated monthly as the sum of each consecutive 12 month period.
 - b. The number of hours of operation of the dry filter back spray booths, calculated daily.
 - c. Annual VOC emissions of sap/equalizer stains, stains, wipe stains, shade stains, sealer, spray pad, lacquer, spatter, thinner, and water base basecoat, calculated daily. The permittee shall retain MSDS records to comply with VOC emission limits as stated in conditions 57 through 60 of this permit.

The permittee shall maintain records of all emission data and operating parameters, including annual material throughput for the furniture finishing operations, necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Southwest Regional Office. These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.
(9 VAC 5-50-50, 9 VAC 5-80-110 F and Condition 24 of NSR permit issued 3/22/99 (as amended 6/19/2000, 1/6/2005, and 3/28/2012))

MACT Subpart JJ – Wood Furniture Manufacturing Operations

66. **MACT Subpart JJ** - The facility is to be operated in compliance with Federal requirements under 40 CFR Part 63 Subpart JJ, including future revisions. All terms used regarding 40 CFR 63 Subpart JJ shall have the meanings as defined in 40 CFR 63.801 and 40 CFR 63.2.
(9 VAC 5-80-110, 40 CFR 63 Subpart A and 40 CFR 63.800)

Emission Standard

67. MACT Subpart JJ – Emission Standard - Volatile Hazardous Air Pollutant (VHAP) emissions from the facility shall not exceed the following limits:

- a. For finishing operations use any of the following methods:
 - i. Achieve a weighted average VHAP content across all coatings of 1.0 lb VHAP/lb solids, as applied;
 - ii. Use compliant finishing materials that meet the following specifications:
 - (a) Each sealer and topcoat has a VHAP content of no more than 1.0 lb VHAP/lb solids, as applied;
 - (b) Each stain has a VHAP content of no more than 1.0 lb VHAP/lb solids, as applied;
 - (c) Each thinner contains no more than 10.0 percent VHAP by weight except where excluded by (e) of this sub-section. For purposes of calculating thinner content of this section, VHAP equals HAP;
 - (d) Each washcoat, basecoat, and enamel that is purchased pre-made, that is, it is not formulated onsite by thinning another finishing material, has a VHAP content of no more than 1.0 lb VHAP/lb solids, as applied;
 - (e) Each washcoat, basecoat, and enamel that is formulated onsite is formulated using a finishing material containing no more than 1.0 lb VHAP/lb solids and a thinner containing no more than 3.0 percent VHAP by weight;
 - iii. Use any combination of averaging and compliant coatings such that no greater than 1.0 lb of VHAP being emitted per lb of solids used;
- b. For cleaning operations strippable spray booth coatings shall be used that contain no more than 0.8 lb VOC/lb solids, as applied;
- c. Compliant contact adhesives shall be used based on the following criteria:
 - i. For aerosol adhesives, as well as hot melt, PVA, and urea-formaldehyde adhesives, and for contact adhesives applied to nonporous substrates there is no limit on the VHAP content of these adhesives;
 - ii. For foam adhesives used in products that meet flammability requirements the VHAP content can be no more than 1.8 lb VHAP/lb solids, as applied;

- iii. For all other contact adhesives the VHAP content can be no more than 1.0 lb VHAP/lb solids, as applied;
- d. Limit formaldehyde emissions in all Finishing Operations and Contact Adhesives by complying with the provisions specified in either of the following methods:
 - i. Limit total formaldehyde (F_{total}) use in coatings and contact adhesives to no more than 400 pounds per rolling 12 month period;
 - ii. Use coatings and contact adhesives only if they are low-formaldehyde coatings and contact adhesives, in any wood furniture manufacturing operations. Low-formaldehyde means a product concentration of less than or equal to 1.0 percent formaldehyde by weight, as described in a certified product data sheet for the material.
- e. At all times, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(9 VAC 5-60-100, 9 VAC 5-80-110 and 40 CFR 63.802)

Continuous Compliance

68. **MACT Subpart JJ – Continuous Compliance** – Continuous compliance with the VHAP emissions limits shall be determined as follows (See Conditions 74 and 75 for content and timing of report submissions and signature requirements.):

- a. For finishing operations when averaging is being used to show continuous compliance, the permittee shall submit the results of the averaging calculation (Equation 1) for each month within that semiannual period and submitting a compliance certification with the semiannual report. The compliance certification shall state that the value of (E), as calculated by Equation 1, is no greater than 1.0. The facility is in violation of the standard if E is greater than 1.0 for any month. A violation of the monthly average is a separate violation of the standard for each day of operation during the month, unless the affected source can demonstrate through records that the violation of the monthly average can be attributed to a particular day or days during the period.

Equation 1

$$E = \frac{(M_{c1}C_{c1} + M_{c2}C_{c2} + * * * + M_{cn}C_{cn} + S_1W_1 + S_2W_2 + * * * + S_nW_n)}{(M_{c1} + M_{c2} + * * * + M_{cn})}$$

- E** = the emission limit achieved by an emission point or a set of emission points, in lb VHAP/lb solids.
- M_c** = the mass of solids in a finishing material or coating (c) used monthly, including exempt finishing materials and coatings, lb solids/month.
- C_c** = the VHAP content of a finishing material or coating (c), in pounds of VHAP per pound of coating solids.
- S** = the VHAP content of a solvent, expressed as a weight fraction, added to finishing materials or coatings.
- W** = the amount of solvent, in pounds, added to finishing materials and coatings during the monthly averaging period.

The Emission Limit (E in lb VHAP / lb solids) equals the sum, for all finishing materials and coatings, of the mass of solids in each material used within that month (M_c in lb solids / month) multiplied by the VHAP content in each material (C_c in lb VHAP / lb solids) plus the sum, for all solvents, of the mass of solvent used monthly (W in lb solvent / month) multiplied by the weight fraction of VHAP in the solvent (S in lb VHAP / lb solvent), with this total being divided by the sum, for all finishing materials and coatings, of the mass of solids in each finishing material and coating used within that month (M_c in lb solids / month).

- b. For finishing operations when compliant coatings are being used to show continuous compliance, the permittee shall use compliant coatings and thinners, maintain records that demonstrate the finishing materials and thinners are compliant, and submit a compliance certification with the semiannual report which states that compliant stains, washcoats, sealers, topcoats, basecoats, enamels, and thinners, as stated in Condition 67, have been used each day in the semiannual reporting period or should otherwise identify the periods of noncompliance and the reasons for noncompliance. The facility is in violation of the standard whenever a noncompliant coating, as demonstrated by records or by a sample of the coating, is used.
- c. For finishing operations any of the following compliance methods may be used: 1) an averaging approach, as in Condition 68.a; 2) compliant coatings, as in Conditions 68.b; 3) a control system; or 4) a combination of these methods.
- d. For contact adhesive operations when compliant adhesives are being used to show compliance, the permittee shall submit a compliance certification with the semiannual report. The compliance certification shall state that compliant contact and/or foam adhesives have been used each day in the semiannual reporting period, or should otherwise identify each day noncompliant contact and/or foam adhesives were used. Each day a noncompliant contact or foam adhesive is used is a single violation of the standard.

- e. For strippable spray booth coatings the permittee shall submit a compliance certification with the semiannual report. The compliance certification shall state that compliant strippable spray booth coatings have been used each day in the semiannual reporting period, or should otherwise identify each day noncompliant materials were used. Each day a noncompliant strippable booth coating is used is a single violation of the standard.
- f. For work practice standards the permittee shall submit a compliance certification with the semiannual report. The compliance certification shall state that the work practice implementation plan is being followed, or should otherwise identify the provisions of the plan that have not been implemented and each day the provisions were not implemented. During any period of time that the permittee is required to implement the provisions of the plan, each failure to implement an obligation under the plan during any particular day is a violation and the Administrator may require the permittee to modify the plan (see Condition 72.a).
- g. For formaldehyde emissions the permittee shall demonstrate compliance by one of the following methods:
- i. Calculate total formaldehyde emissions from all finishing materials and contact adhesives used at the facility using Equation 5 and maintain a value of F_{total} no more than 400 pounds per rolling 12 month period.

Equation 5

$$F_{total} = (C_{f1}V_{c1} + C_{f2}V_{c2} + \dots + C_{fn}V_{cn} + G_{f1}V_{g1} + G_{f2}V_{g2} + \dots + G_{fn}V_{gn})$$

Where:

- F_{total} = total formaldehyde emissions in each rolling 12 month period
- C_f = the formaldehyde content of a finishing material (c), in pounds of formaldehyde per gallon of coating (lb/gal)
- V_c = the volume of formaldehyde-containing finishing material (c), in gal
- G_f = the formaldehyde content of a contact adhesive (g), in pounds of formaldehyde per gallon of contact adhesive (lb/gal)
- V_g = the volume of formaldehyde-containing contact adhesive (g), in gal
- ii. Use of coatings and contact adhesives only if they are low-formaldehyde coatings and adhesives maintaining a certified product data sheet for each coating and contact adhesive used as required by §63.806(b)(1), and submitting a compliance certification with the semiannual report required by §63.807(c).

The compliance certification shall state that low-formaldehyde coatings and contact adhesives, as applicable, have been used each day in the semiannual reporting period or should otherwise identify the periods of noncompliance and the reasons for noncompliance. An affected source is in violation of the standard whenever a coating or contact adhesive that is not low-formaldehyde, as demonstrated by records or by a sample of the coating or contact adhesive, is

used. Use of a noncompliant coating or contact adhesive is a separate violation for each day the noncompliant coating or contact adhesive is used.

(9 VAC 5-60-100, 9 VAC 5-80-110, 40 CFR 63.8, 40 CFR 63.804(g) and 40 CFR 63.804(h))

Testing

69. **MACT Subpart JJ – Testing** - If compliance testing is conducted the tests shall be conducted using the test methods and procedures as specified in 40 CFR 63.805 of Subpart JJ.

(9 VAC 5-60-100, 9 VAC 5-80-110 and 40 CFR 63.805)

Submittals

70. **MACT Subpart JJ – Submittals** - All submittals regarding 40 CFR 63, Subpart JJ to the Administrator shall be sent to EPA Region III and the Southwest Regional Office at the following addresses:

U.S. Environmental Protection Agency, Region III
Air Protection Division (3AP00)
Attn: Wood Furniture NESHAP Coordinator
1650 Arch Street
Philadelphia, PA 19103-2029

Virginia Department of Environmental Quality
Southwest Regional Office
Attn: Air Compliance Manager
355-A Deadmore Street
Abingdon, VA 24210

(9 VAC 5-60-100, 9 VAC 5-80-110 and 40 CFR 63.13)

Operation and Maintenance

71. **MACT Subpart JJ – Operations and Maintenance** - The permittee shall meet the following operation and maintenance requirements:

- a. Malfunctions shall be corrected as soon as practicable after their occurrence.
- b. Operation and maintenance requirements established pursuant to section 112 of the Clean Air Act are enforceable independent of emissions limitations or other requirements in relevant standards.
- c. Determination of whether operation and maintenance procedures are being used will be based on information available to the DEQ which may included, but is not limited

to, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(9 VAC 5-60-100, 9 VAC 5-80-110, 40 CFR 63.6(e)(1)(ii) and 40 CFR 63.802(c))

Work Practice Standards

72. MACT Subpart JJ – Work Practice Standards - The permittee shall develop and implement the following work practice standards:

a. Work practice implementation plan –

- i.** The permittee shall prepare and maintain a written work practice implementation plan that defines environmentally desirable work practices for the finishing and gluing operations and addresses each of the work practice standards presented in Conditions 72.b through 72.l that follows. The plan shall be developed no more than 60 days after the compliance date.
- ii.** The written work practice implementation plan shall be available for inspection by the Administrator upon request. If the Administrator determines that the work practice implementation plan does not include sufficient mechanisms for ensuring that the work practice standards are being implemented, the Administrator may require the permittee to modify the plan. Revisions or modifications to the plan do not require a revision of the source's Title V permit.
- iii.** The inspection and maintenance plan required by Condition 72.c and the formulation assessment plan for finishing operation required by Condition 72.l are also reviewable by the Administrator.

b. Operator training course – The permittee shall train all new and existing personnel, including contract personnel, who are involved in finishing, gluing, cleaning, and washoff operations, use of manufacturing equipment in these operations, or implementation of the requirements of 40 CFR Part 63 Subpart JJ. All new personnel shall be trained upon hiring. All existing personnel shall be trained within six months of the compliance date. All personnel shall be given refresher training annually. The permittee shall maintain a copy of the training program with the work practice implementation plan. The training program shall include, at a minimum, the following:

- i.** A list of all current personnel by name and job description that are required to be trained;
- ii.** An outline of the subjects to be covered in the initial and refresher training for each position or group of personnel;

- iii. Lesson plans for courses to be given at the initial and the annual refresher training that include, at a minimum, appropriate application techniques, appropriate cleaning and washoff procedures, appropriate equipment setup and adjustment to minimize finishing material usage and overspray, and appropriate management of cleanup wastes, and
 - iv. A description of the methods to be used at the completion of initial or refresher training to demonstrate and document successful completion.
- c. Inspection and maintenance plan – The permittee shall prepare and maintain with the work practice implementation plan a written leak inspection and maintenance plan that specifies:
- i. A minimum visual inspection frequency of once per month for all equipment used to transfer or apply coatings, adhesives, or organic HAP solvents;
 - ii. An inspection schedule;
 - iii. Methods for documenting the date and results for each inspection and any repairs that were made;
 - iv. The timeframe between identifying the leak and making the repair, which adheres, at a minimum, to the following schedule:
 - (a) A first attempt at repair (e.g., tightening of packing glands) shall be made no later than five calendar days after the leak is detected; and
 - (b) Final repairs shall be made within 15 calendar days after the leak is detected, unless the leaking equipment is to be replaced by a new purchase, in which case repairs shall be completed with three months.
- d. Cleaning and washoff solvent accounting system – The permittee shall develop an organic HAP solvent accounting form to record:
- i. The quantity and type of organic HAP solvent used each month for washoff and cleaning, as defined in 40 CFR 63.801;
 - ii. The number of pieces washed off, and the reason for the washoff; and
 - iii. The quantity of spent organic HAP solvent generated from each washoff and cleaning operation each month, and whether it is recycled onsite or disposed offsite.
- e. Chemical composition of cleaning and washoff solvents – The permittee shall not use cleaning or washoff solvents that contain any of the pollutants listed in Table 4 of 40

CFR Part 63 Subpart JJ, in concentrations subject to MSDS reporting as required by OSHA.

- f. Spray booth cleaning – The permittee shall not use compounds containing more than 8.0 percent by weight of VOC for cleaning spray booth components other than conveyors, continuous coaters and their enclosures, or metal filters, or plastic filters, unless the spray booth is being refurbished. If the spray booth is being refurbished, that is the spray booth coating or other protective material used to cover the booth is being replaced, the permittee shall use no more than 1.0 gallon of organic HAP solvent per booth to prepare the surface of the booth prior to applying the booth coating.
- g. Storage requirements – The permittee shall use normally closed containers for storing finishing, gluing, cleaning, and washoff materials.
- h. Application equipment requirements – Each owner or operator shall not use conventional air spray guns except when all emissions from the finishing application station are routed to a functioning control device.
- i. Line cleaning – The permittee shall pump or drain all organic HAP solvent used for line cleaning into a normally closed container.
- j. Gun cleaning - The permittee shall collect all organic HAP solvent used to clean spray guns into a normally closed container.
- k. Washoff operations - The permittee shall control emissions from washoff operations by:
 - i. Using normally closed tanks for washoff; and
 - ii. Minimizing dripping by tilting or rotating the part to drain as much solvent as possible.
- l. Formulation assessment plan for finishing operations - The permittee shall prepare and maintain with the work practice implementation plan a formulation assessment plan that:
 - i. Identifies VHAP from the list presented in Table 5 of 40 CFR Part 63 Subpart JJ that are being used in finishing operations;
 - ii. Establishes a baseline level of usage for each VHAP identified. The baseline usage level shall be the highest annual usage from 1994, 1995, or 1996, for each VHAP identified, except for formaldehyde and styrene which shall be determined as specified by 40 CFR 63.803 (1)(2).

For VHAPs that do not have a baseline, one will be established according to Condition (vi) below.

- iii. Tracks the annual usage of each VHAP identified that is present in amounts subject to MSDS reporting as required by OSHA.
- iv. If the annual usage of the VHAP identified exceeds its baseline level, then the permittee shall provide a written notification to the Southwest Regional Office that describes the amount of the increase and explains the reasons for exceedance of the baseline level. The following explanations would relieve the owner or operator from further action, unless the affected source is not in compliance with any State regulations or requirements for that VHAP:
 - (a) The exceedance is no more than 15.0 percent above the baseline level;
 - (b) Usage of the VHAP is below the *de minimis* level presented in Table 5 of 40 CFR Part 63 Subpart JJ for that VHAP;
 - (c) The affected source is in compliance with its State's air toxic regulations or guidelines for the VHAP; or
 - (d) The source of the pollutant is a finishing material with a VOC content of no more than 1.0 lb VOC/lb solids, as applied.
- v. If none of the explanations listed in Condition 72.1.iv are the reasons for the increase, the permittee shall confer with the Southwest Regional Office, to discuss the reason for the increase and whether there are practical and reasonable technology-based solutions for reducing the usage. The evaluation of whether a technology is reasonable and practical shall be based on cost, quality, and marketability of the product, whether the technology is being used successfully by other wood furniture manufacturing operations, or other criteria mutually agreed upon by the Southwest Regional Office, and the owner or operator. If there are no practical and reasonable solutions, the facility need take no further action. If there are solutions, the owner or operator shall develop a plan to reduce the usage of the pollutant to the extent feasible. The plan shall address the approach to be used to reduce emissions, a timetable for implementing the plan, and a schedule for submitting notification of progress.
- vi. If the permittee uses a VHAP of potential concern listed in Table 6 of 40 CFR Part 63 Subpart JJ for which a baseline level has not been previously established, then the baseline level shall be established as the *de minimis* level provided in that same table for that chemical. The permittee shall track the annual usage of each VHAP of potential concern identified that is present in amounts subject to MSDS reporting as required by OSHA. If usage of the VHAP of potential concern exceeds the *de minimis* level listed in Table 6 of 40 CFR Part 63 Subpart JJ for that chemical, then the permittee shall provide an explanation to the

Southwest Regional Office that documents the reason for the exceedance of the *de minimis* level. If the explanation is not one of those listed in Condition 72.l.iv, the affected source shall follow the procedures established in Condition 72.l.v. (9 VAC 5-60-100, 9 VAC 5-80-110 and 40 CFR 63.803(a-1))

Recordkeeping

73. MACT Subpart JJ – Recordkeeping - The permittee shall maintain records of the following:

- a. For emission limit purposes, the permittee shall maintain the following:
 - i. A certified product data sheet for each finishing material, thinner, contact adhesive, and strippable spray booth coating subject to the emission limits in Condition 67,
 - ii. The VHAP content, in lb VHAP/lb solids, as applied, of each finishing material and contact adhesive subject to the emission limits in Condition 67.a and 67.c; and
 - iii. The VOC content, in lb VOC/lb solids, as applied, of each strippable booth coating subject to the emission limits in Condition 67.b.
 - iv. The formaldehyde content, in lb/gal, as applied, of each finishing material and contact adhesive subject to the emission limits in Condition 67.d and chooses to comply with the 400 lb/yr limits on formaldehyde in Condition 67.d
- b. Following the averaging method the permittee shall maintain copies of the averaging calculation for each month following the compliance date, as well as the data on the quantity of coatings and thinners used that is necessary to support the calculation of E in Equation 1.
- c. The permittee shall maintain onsite the work practice implementation plan and all records associated with fulfilling the requirements of that plan, including, but not limited to:
 - i. Records demonstrating that the operator training program required by Condition 72.b is in place;
 - ii. Records collected in accordance with the inspection and maintenance plan required by Condition 72.c;
 - iii. Records associated with the cleaning solvent accounting system required by Condition 72.d;

- iv. Records associated with the limitation on the use of conventional air spray guns showing total finishing material usage and the percentage of finishing materials applied with conventional air spray guns for each semiannual period required by Condition 72.h;
 - v. Records associated with the formulation assessment plan required by Condition 72.i; and
 - vi. Copies of documentation such as logs developed to demonstrate that the other provisions of the work practice implementation plan are followed.
- d. The permittee shall maintain records of the compliance certifications submitted for each semiannual period following the compliance date.
 - e. The permittee shall maintain records of all other information submitted with the compliance status report and the semiannual reports.
 - f. The permittee shall maintain files of all information (including all reports and notifications) required, recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two (2) years of data shall be retained on site. The remaining three (3) years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.

(9 VAC 5-60-100, 9 VAC 5-80-110, 40 CFR 63.10(b)(1) and 63.806)

Notification of Compliance

- 74. MACT Subpart JJ – Notification of Compliance** - Each time a notification of compliance status is required, the permittee shall submit to the Southwest Regional Office, a notification of compliance status, signed by a responsible official of the company that owns or operates the facility who shall certify its accuracy, attesting to whether the source has complied with 40 CFR Part 63 Subpart JJ. The notification shall list:
- a. The methods that were used to determine compliance;
 - b. The results of any performance tests, opacity or visible emission observations, and/or other monitoring procedures or methods that were conducted;
 - c. The methods that will be used for determining continuing compliance, including a description of monitoring and reporting requirements and test methods;
 - d. The type and quantity of hazardous air pollutants emitted by the source, reported in units and averaging times and in accordance with the test methods specified;

- e. An analysis demonstrating whether the facility is a major source or an area source (using the emissions generated for this notification);
- f. A statement by the permittee as to whether the facility has complied with Subpart JJ as expressed in this permit.
- g. If low-formaldehyde coatings and contact adhesives are being used to comply with the formaldehyde limit, a statement that low-formaldehyde coatings and contact adhesives, as applicable, have been used each day in the semiannual reporting period or should otherwise identify the periods of noncompliance and the reasons for noncompliance.

(9 VAC 5-60-100, 9 VAC 5-80-110, 40 CFR 63.804(h) and 40 CFR 63.9(h))

Reporting

75. **MACT Subpart JJ – Reporting** - Reporting not otherwise required by this permit shall consist of the following:

- a. The permittee when demonstrating continuous compliance shall submit a semi-annual report covering the previous six (6) months of wood furniture manufacturing operations:
 - i. The time periods to be addressed are the calendar months January through June and July through December. The reports shall be submitted no later than 30 calendar days after the end of each 6-month period.
 - ii. The semiannual reports shall include the information required by Condition 68, a statement of whether the facility was in compliance or noncompliance, and, if the facility was in noncompliance, the measures taken to bring the facility into compliance.
 - iii. The frequency of the reports required by Condition a. above shall not be reduced from semiannually regardless of the history of the owner's or operator's compliance status.
- b. The permittee, when required to provide a written notification by Condition 72.1.iv for exceedance of a baseline level, shall include in the notification one or more statements that explains the reasons for the usage increase. The notification shall be submitted no later than 30 calendar days after the end of the annual period in which the usage increase occurred.

Copies of reports shall be submitted to the U.S. Environmental Protection Agency and Virginia DEQ at the addresses given in Condition 70.

(9 VAC 5-60-100, 9 VAC 5-80-110, 40 CFR 63.10(d) and 40 CFR 63.807)

Wood Drying Kilns Requirements

76. **Visible Emissions** – Visible emissions from the wood drying equipment shall not exceed 20 percent opacity, except during one six-minute period in any one hour in which visible emissions shall not exceed 60% opacity, as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). A visible emissions check shall be performed on all wood drying operations, for compliance with the limits noted above. Visible checks shall be conducted at least monthly during periods of normal facility operation for not less than two months following the return of the kilns to operation, to determine if there are any visible emissions. Checks may be discontinued if none are observed. If visible emissions are observed during these checks, or at any other time, visible emissions evaluations (VEE) in accordance with 40 CFR 60 Appendix A, Method 9 shall be conducted on those units with visible emissions. The VEE shall be conducted for a minimum of six (6) minutes. If the six-minute average opacity exceeds 20%, the VEE shall be immediately continued for a total evaluation time of 18 minutes, or procedures to correct the visible emission condition shall be taken immediately. Corrective action shall be followed by a six-minute VEE in accordance with Method 9 to confirm compliance, or for 18 minutes if the 20% opacity limit was exceeded. A record of each visible emissions observation shall be maintained, including any data required by 40 CFR 60 Appendix A, Method 9. The record shall include, at a minimum, the date, time, name of the emission unit, the applicable visible emissions requirement, the results of the observation, and the name of the observer.
(9 VAC 5-40-20, 9 VAC 5-40-80, and 9 VAC 5-80-110 K)

77. **MACT Subpart DDDD Requirements** – Except where this permit is more restrictive, the permittee, in accordance with 40 CFR 63 Subpart DDDD – National Emission Standards for Hazardous Air Pollutants, Plywood and Composite Wood Products, shall record and retain all information necessary to determine that the operation of the lumber dry kilns is in compliance with the 40 CFR 63 Subpart. These requirements include, but are not limited to, the following:

- a. Maintenance records in accordance with 40 CFR 63.2250, 40 CFR 63.6(e)(1)(i), and 40 CFR 63.10(b).
- b. Records of all notifications and reports submitted to comply with 40 CFR 63 Subpart DDDD as required by 40 CFR 63.2282(a)(1).

Each record must be kept for a minimum of 5 years by the permittee as specified in 40 CFR 63.2283(c).

(9 VAC 5-60-90, 9 VAC 5-60-100, 9 VAC 5-80-110, and 40 CFR 63 Subpart DDDD)

Insignificant Emission Units

78. **Insignificant Emission Units** - The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720B)	Rated Capacity (9 VAC 5-80-720C)
WP-1	Wood sealing (garden sprayer)	9 VAC 5-80-720B	VOC	--
	UV roll coat finishing line	9 VAC 5-80-720B	VOC	--
DG-1	Degreasing/parts cleaning	9 VAC 5-80-720B	VOC	--

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

Permit Shield & Inapplicable Requirements

79. **Permit Shield & Inapplicable Requirements** - Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
40 CFR Part 64	Compliance Assurance Monitoring	The following pollution specific emission units (PSEU) have uncontrolled emissions less than 100 tpy or are not controlled: Boiler B-2 – less than 100 tons uncontrolled emissions and is not controlled)

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by (i) the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.

(9 VAC 5-80-140)

General Conditions

80. **General Conditions - Federal Enforceability** - All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.

(9 VAC 5-80-110 N)

81. **General Conditions - Permit Expiration** - This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9 VAC 5-80-80, the right of the facility to operate shall be terminated upon permit expiration.
(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)
82. **General Conditions - Permit Expiration** - The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)
83. **General Conditions - Permit Expiration** - If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.
(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)
84. **General Conditions - Permit Expiration** - No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.
(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)
85. **General Conditions - Permit Expiration** - If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)
86. **General Conditions - Permit Expiration** - The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.
(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)
87. **General Conditions - Recordkeeping and Reporting** - All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
- a. The date, place as defined in the permit, and time of sampling or measurements;

- b. The date(s) analyses were performed;
- c. The company or entity that performed the analyses;
- d. The analytical techniques or methods used;
- e. The results of such analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

(9 VAC 5-80-110 F)

88. **General Conditions -Recordkeeping and Reporting** - Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

(9 VAC 5-80-110 F)

89. **General Conditions -Recordkeeping and Reporting** - The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than March 1 and September 1 of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

- a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31; and
- b. All deviations from permit requirements. For purpose of this permit, deviations include, but are not limited to:
 - i. Exceedance of emissions limitations or operational restrictions;
 - ii. Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or Compliance Assurance Monitoring (CAM) which indicates an exceedance of emission limitations or operational restrictions; or,
 - iii. Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.
- c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."

(9 VAC 5-80-110 F)

90. **General Conditions - Annual Compliance Certification** - Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than March 1 each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices for the period ending December 31. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. The permittee shall maintain a copy of the certification for five (5) years after submittal of the certification. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

- a. The time period included in the certification. The time period to be addressed is January 1 to December 31;
- b. The identification of each term or condition of the permit that is the basis of the certification;
- c. The compliance status;
- d. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance;
- e. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period;
- f. Such other facts as the permit may require to determine the compliance status of the source; and
- g. One copy of the annual compliance certification shall be submitted to EPA in electronic format only. The certification document should be sent to the following electronic mailing address:

R3_APD_Permits@epa.gov

(9 VAC 5-80-110 K.5)

91. **General Conditions - Permit Deviation Reporting** - The permittee shall notify the Director, Southwest Regional Office within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the

next semi-annual compliance monitoring report pursuant to Condition 89 of this permit.
(9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

92. **General Conditions - Failure/Malfunction Reporting** - In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the Director, Southwest Regional Office by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within 14 days of discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, Southwest Regional Office.
(9 VAC 5-20-180 C and 9 VAC 5-80-110)
93. **General Conditions - Severability** - The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.
(9 VAC 5-80-110 G.1)
94. **General Conditions - Duty to Comply** - The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is ground for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.
(9 VAC 5-80-110 G.2)
95. **General Conditions - Need to Halt or Reduce Activity not a Defense** - It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
(9 VAC 5-80-110 G.3)
96. **General Conditions - Permit Modification** - A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1605, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.
(9 VAC 5-80-190 and 9 VAC 5-80-260)
97. **General Conditions - Property Rights** - The permit does not convey any property rights of any sort, or any exclusive privilege.
(9 VAC 5-80-110 G.5)

98. **General Conditions - Duty to Submit Information** - The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.
(9 VAC 5-80-110 G.6)
99. **General Conditions - Duty to Submit Information** - Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.
(9 VAC 5-80-110 K.1)
100. **General Conditions - Duty to Pay Permit Fees** - The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350 in addition to an annual permit maintenance fee consistent with the requirements of 9 VAC 5-80-2310 through 9 VAC 5-80-2350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department. The amount of the annual permit maintenance fee shall be the largest applicable base permit maintenance fee amount from Table 8-11A in 9 VAC 5-80-2340, adjusted annually by the change in the Consumer Price Index.
(9 VAC 5-80-110 H, 9 VAC 5-80-340 C and 9 VAC 5-80-2340 B)
101. **General Conditions - Fugitive Dust Emission Standards** - During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:
- a. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
 - b. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
 - c. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or similar operations;

- d. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,
- e. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-40-90, 9 VAC 5-50-90 and 9 VAC 5-80-110)

102. **General Conditions - Startup, Shutdown, and Malfunction** - At all times, including periods of startup, shutdown, and soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(9 VAC 5-40-20 E, 9 VAC 5-50-20 E, and 9 VAC 5-80-110)

103. **General Conditions - Alternative Operating Scenarios** - Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1.

(9 VAC 5-80-110 J)

104. **General Conditions - Inspection and Entry Requirements** - The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

- a. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
- b. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
- c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
- d. Sample or monitor at reasonable times' substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110 K.2)

105. General Conditions - Reopening For Cause - The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F. The conditions for reopening a permit are as follows:

- a. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
- b. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- c. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110 L)

106. General Conditions - Permit Availability - Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.

(9 VAC 5-80-150 E)

107. General Conditions - Transfer of Permits - No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.

(9 VAC 5-80-160)

108. General Conditions - Transfer of Permits - In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200.

(9 VAC 5-80-160)

109. General Conditions - Transfer of Permits - In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200.

(9 VAC 5-80-160)

110. **General Conditions - Malfunction as an Affirmative Defense** - A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements stated in Condition 111 are met.
(9 VAC 5-80-250)
111. **General Conditions - Malfunction as an Affirmative Defense** - The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
- a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
 - b. The permitted facility was at the time being properly operated.
 - c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.
 - d. The permittee notified the Board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-110 F.2.b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.
- (9 VAC 5-80-250)
112. **General Conditions - Malfunction as an Affirmative Defense** - In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof.
(9 VAC 5-80-250)
113. **General Conditions - Malfunction as an Affirmative Defense** - The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.
(9 VAC 5-80-250)
114. **General Conditions - Permit Revocation or Termination for Cause** - A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may

prescribe any permit for any grounds for revocation or termination or for any other violations of these regulations.

(9 VAC 5-80-190 C and 9 VAC 5-80-260)

115. **General Condition – Violation of Ambient Air Quality Standard** – The permittee shall, upon request of the DEQ, reduce the level of operation or shut down a facility, as necessary to avoid violating any primary ambient air quality standard and shall not return to normal operation until such time as the ambient air quality standard will not be violated.
(9 VAC 5-80-110)
116. **General Conditions - Duty to Supplement or Correct Application** - Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.
(9 VAC 5-80-80 E and 9 VAC 5-80-110)
117. **General Conditions - Stratospheric Ozone Protection** - If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.
(40 CFR Part 82, Subparts A-F)
118. **General Conditions - Asbestos Requirements** - The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150).
(9 VAC 5-60-70 and 9 VAC 5-80-110 A.1)
119. **General Conditions - Accidental Release Prevention** - If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.
(9 VAC 5-80-110 and 40 CFR Part 68)
120. **General Conditions - Changes to Permits for Emissions Trading** - No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.
(9 VAC 5-80-110 I)
121. **General Conditions - Emissions Trading** - Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

- a. All terms and conditions required under 9 VAC 5-80-110, except subsection N, shall be included to determine compliance.
- b. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
- c. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.

(9 VAC 5-80-110 I)